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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,661	06/27/2003	David W. Koenig	KCC 4948 (K-C 17,907)	7070

321 7590 09/22/2005

SENNIGER POWERS LEAVITT AND ROEDEL
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER

HAND, MELANIE JO

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,661

Applicant(s)

KOENIG ET AL.

Examiner

Melanie J. Hand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date various(3).
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

Applicant's arguments, see Response to Restriction Requirement, filed July 28, 2005, with respect to a restriction requirement for claims 1-30 and election of species requirement in the event of the election by applicant of Group I have been fully considered and are persuasive. The requirements of restriction and election of species have both been withdrawn.

Priority

Acknowledgement is made of Applicant's claim for priority under 35 U.S.C. 120 as a continuation-in-part of Application No. 10/029,404, filed on December 20, 2001, and issued as U.S. Patent No. 6,891,079 on May 10, 2005.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on September 29, 2003, October 30, 2003, December 16, 2004 and January 10, 2005, were each filed after the mailing date of the Application on June 27, 2003. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Objections

Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 17 is a duplicate of Claim 16.

Claims 19 and 23 are objected to as being unclear regarding the phrase "not substantially affecting the growth rate of Gram positive bacteria." Examiner has found several references teaching more substantial antimicrobial activity by saponin contained in Yucca extract against Gram positive bacteria than Gram negative bacteria, each attributing this result to the morphological difference between Gram positive and Gram negative organisms, i.e. the outer membrane of a Gram positive bacteria organism only contains an outer peptidoglycan membrane which is not a sufficient permeability barrier to lipophilic solutes which Nostro teaches to be a more effective solvent in the extraction of saponin (Nostro et al, Letters in Applied Microbiology, 2000, 30, pp. 379-384). Gram negative organisms have an outer phospholipidic membrane making this outer membrane impermeable to lipophilic solutes. Therefore, Examiner requests that Applicant set forth in their response to this Office Action a clear definition of "not substantially affecting" with respect to the growth rate of Gram positive bacteria.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Howard et al (U.S. Patent No. 6,552,171).

With respect to **Claim 1**: Howard teaches a hydrolyzed jojoba protein solution for use in skin lotions, creams, and sanitizing wipes (Col. 3, lines 4,5,11,12). Howard teaches compositions for hand lotion (Col. 8, Table 6) and hand cream (Col. 9, Table 7) comprising said jojoba protein solution, as well as Yucca extract and green tea extract, which contains catechin, considered here as a broad spectrum antimicrobial.

With respect to **Claims 3 and 4**: Howard teaches that the hand lotion and hand cream solutions comprising the jojoba protein both comprise Yucca extract present in 0.03% by weight (Col. 8, Table 6).

With respect to **Claim 5**: Howard teaches that the hand lotion and hand cream solutions also contain green tea extract (Col. 8, Table 6 and Col. 9, Table 7) whose active ingredient is catechin, which has widely known antioxidant and antimicrobial uses.

With respect to **Claims 7 and 8**: Howard teaches that the green tea extract is present in both the hand lotion and hand cream solutions in 0.05% by weight (Col. 8, Table 6 and Col. 9, Table 7) Therefore the catechin is present in at most 0.05% by weight of the solution.

With respect to **Claim 9**: Howard teaches that the hand lotion and hand cream solutions are also comprised of goldenrod extract, used as an astringent in both solutions (Col. 8, Table 6 and Col. 9, Table 7).

With respect to **Claim 10**: Howard teaches a hydrolyzed jojoba protein solution for use in sanitizing wipes (Col. 3, lines 4,5,11,12). Howard teaches hand cream and hand lotion solutions comprised of Yucca extract and green tea extract (Col. 8, Table 6 and Col. 9, Table 7), which contains catechin, considered here to be a broad spectrum antimicrobial.

With respect to **Claims 12 and 13**: Howard teaches that the hand lotion and hand cream solutions comprising the jojoba protein both comprise Yucca extract present in 0.03% by weight (see Col. 8, Table 6).

With respect to **Claims 14 and 15**: Howard teaches that the hand lotion and hand cream solutions also contain green tea extract whose active ingredient is catechin, which has widely known antioxidant and antimicrobial uses.

With respect to **Claims 16 and 17**: Howard teaches that the green tea extract is present in both the hand lotion and hand cream solutions in 0.05% by weight (Col. 8, Table 6 and Col. 9, Table 7) Therefore the catechin is present in at most 0.05% by weight of the solution.

With respect to **Claim 18**: Howard teaches that the hand lotion and hand cream solutions are also comprised of goldenrod extract, used as an astringent in both solutions (Col. 8, Table 6 and Col. 9, Table 7).

With respect to **Claim 19**: Howard teaches creating a jojoba solution that can be used in sanitary wipes, hand lotion and hand cream, that is comprised of Yucca extract (Col. 8, Table 6, Col. 9, Table 7). The roots of Yucca species plants contain a saponin (see Yahoo Geocities reference, page 1, paragraph 12) and saponins are a class of triterpenes. Nostro teaches that antimicrobial activity is attributed to terpenes. He also teaches that plant extracts containing saponin exhibit bacterial growth inhibition of both Gram positive bacteria and Gram negative bacteria (Nostro et al, *Letters in Applied Microbiology*, 2000, 30, pp. 379-384 (provided by Applicant)).

With respect to **Claims 21 and 22**: Howard teaches that the hand lotion and hand cream solutions comprising the jojoba protein both comprise Yucca extract present in 0.03% by weight (see Col. 8, Table 6 and Col. 9, Table 7).

With respect to **Claim 23**: Howard teaches creating a jojoba solution that can be used in sanitary wipes, hand lotion and hand cream, that is comprised of Yucca extract and green tea

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extract which contains catechin, considered here to be a broad spectrum antimicrobial (Col. 8, Table 6, Col. 9, Table 7). The roots of Yucca species plants contain a saponin (see Yahoo Geocities reference, page 1, paragraph 12) and saponins are a class of triterpenes. Nostro teaches that antimicrobial activity is attributed to terpenes. He also teaches that plant extracts containing saponin exhibit bacterial growth inhibition of both Gram positive bacteria and Gram negative bacteria (Nostro et al, *Letters in Applied Microbiology*, 2000, 30, pp. 379-384 (provided by Applicant)).

With respect to **Claims 25 and 26**: Howard teaches that the hand lotion and hand cream solutions comprising the jojoba protein both comprise Yucca extract present in 0.03% by weight (see Col. 8, Table 6).

With respect to **Claims 27 and 28**: Howard teaches that the hand lotion and hand cream solutions also contain green tea extract whose active ingredient is catechin, which has widely known antioxidant and antimicrobial uses.

With respect to **Claims 29 and 30**: Howard teaches that the green tea extract is present in both the hand lotion and hand cream solutions in 0.05% by weight (Col. 8, Table 6 and Col. 9, Table 7) Therefore the catechin is present in at most 0.05% by weight of the solution.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6, 11, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard et al in view of Sato (Japanese Patent No. 2001011496).

With respect to **Claim 2**: Howard does not teach which specific species of Yucca is used. Sato teaches a sterilization detergent comprised of Yucca Schidigen extrudate for cleaning a working machine and the fingers of its operator (see Abstract). Sato teaches that the Yucca Schidigen extrudate contributes antifungal effect even after the ethanol in the composition has evaporated (see Abstract). Therefore it would be obvious to use Yucca Schidigen (also known as Yucca Schidigera) as the species of Yucca extract in the jojoba solution taught by Howard.

With respect to **Claim 6**: Howard does not teach an antimicrobial that conforms to any of the items in the group set forth in claim 6. Sato teaches a sterilization detergent that is comprised of ethanol (see Abstract). Alcohols are known in the art for their antimicrobial uses, therefore it would be obvious to modify the jojoba protein solution taught by Howard to contain ethanol, as it would impart additional microbial function.

With respect to **Claim 11**: Howard does not teach which specific species of Yucca is used. Sato teaches a sterilization detergent comprised of Yucca Schidigen extrudate for use on a working machine and the fingers of its operator (see Abstract). Sato teaches that the Yucca Schidigen extrudate contributes antifungal effect even after the ethanol in the composition has evaporated (see Abstract). Therefore it would be obvious to use Yucca Schidigen (also known as Yucca Schidigera) as the species of Yucca extract in the jojoba solution taught by Howard.

With respect to **Claim 20**: Howard does not teach which specific species of Yucca is used. Sato teaches a sterilization detergent comprised of Yucca Schidigen extrudate for use on a working machine and the fingers of its operator (see Abstract). Sato teaches that the Yucca Schidigen extrudate contributes antifungal effect even after the ethanol in the composition has evaporated (see Abstract). Therefore it would be obvious to use Yucca Schidigen (also known as Yucca Schidigera) as the species of Yucca extract in the jojoba solution taught by Howard.

With respect to **Claim 24**: Howard does not teach which specific species of Yucca is used. Sato teaches a sterilization detergent comprised of Yucca Schidigen extrudate for use on a working machine and the fingers of its operator (see Abstract). Sato teaches that the Yucca Schidigen extrudate contributes antifungal effect even after the ethanol in the composition has evaporated (see Abstract). Therefore it would be obvious to use Yucca Schidigen (also known as Yucca Schidigera) as the species of Yucca extract in the jojoba solution taught by Howard.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie J Hand
Examiner
Art Unit 3761

MJH

TATYANA ZALUKAEV
PRIMARY EXAMINER

